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5. Author(s)

1. David Hughes	4. David Woodward
2. John Holtzman	5. Charles Jenkins
3. Thomas Wittenberg	6. David Campbell

6. Contributing Organisation(s)  
Abt Associates Inc.  
Deloitte & Touche

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**STRENGTHENING AGRICULTURAL  
MARKET INFORMATION SYSTEMS  
AND SERVICES IN KENYA**

**VOLUME 1: EXECUTIVE SUMMARY**

# **AGRICULTURAL MARKETING IMPROVEMENT STRATEGIES PROJECT**

Under contract to the Agency for International Development, Bureau for Science and Technology, Office of Rural Development  
Project Office 4800 Montgomery Lane, Suite 600, Bethesda, MD 20814 • Telephone: (301) 913-0500 • Telex: 312636

## **STRENGTHENING AGRICULTURAL MARKET INFORMATION SYSTEMS**

### **AND SERVICES IN KENYA**

Prepared for USAID/Kenya by the  
Agricultural Marketing Improvement Strategies Project (AMIS)

#### Team Composition

David Hughes, Deloitte & Touche, Team Leader  
John Holtzman, Abt Associates Inc  
Thomas Wittenberg, Abt Associates Inc  
David Woodward, Deloitte & Touche  
Charles Jenkins, Deloitte Touche  
David Campbell, consultant to Deloitte & Touche

Nairobi, Kenya

September 1990

Prime Contractor: **Abt Associates Inc.**, 4800 Montgomery Lane, Suite 600, Bethesda, MD 20814 • (301) 913-0500

Subcontractor: **Postharvest Institute for Perishables**, University of Idaho, Moscow, Idaho 83843 • (208) 885-6791

**Deloitte & Touche**, 386 Woolwich Street, Guelph, Ontario N1H 3W7 Canada • (519) 822-2000

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The principal objectives of the AMIS Project are as follows:

- . conduct diagnostic studies, using rapid appraisal methods and applied research of marketing system organization and performance, marketing parastatal reorganization and privatization, and agribusiness opportunities in developing countries;
- . prescribe and, where suitable, monitor and evaluate the impacts of agricultural marketing policy reform programs;
- . recommend pilot innovations in marketing system organization, institutional arrangements, post-harvest handling, marketing, processing and storage technology, and market information services;
- . distill significant lessons from USAID, other donor, developing country, and private sector experience in agricultural marketing development projects, programs and policy reform.

This current study, which requires description of existing market information systems in Kenya, diagnosis of key constraints to improved performance, and prescription of a program for improving the usefulness of public market information to both public and private users in Kenya, is consistent with several of AMIS's key objectives. The study team gratefully acknowledges the co-operation of numerous government officials, farmers, marketing agents, and expatriate advisors. Their candid and lively responses to our many questions provide the basis for our findings and recommendations.

**STRENGTHENING AGRICULTURAL MARKET INFORMATION  
SYSTEMS AND SERVICES IN KENYA**

**EXECUTIVE SUMMARY**

**1. STUDY BACKGROUND**

The rationale of the USAID/Government of Kenya funded Kenya Market Development Program (KMDP) centers on the contention that unnecessary cereals transportation and marketing costs can be reduced if policies and laws affecting market structure are changed and road conditions improved. Current laws underpin the government's authority to restrict cereals movement within and between districts.

Under the KMDP, the Government of Kenya will invest in road improvements in six districts of the country and will work with USAID and other donors in revising laws and policies that affect maize, maize products, beans, millet and sorghum marketing. To encourage private traders to increase their cereals marketing, KMDP will support the routine announcement of current and revised cereals marketing policies and laws. In addition, official and actual cereals prices will be announced as will the prices of those horticultural crops that provide an alternative enterprise for cereals producers. The characteristics of maize, bean and horticultural crop production and marketing in Kenya suggest that marketing efficiency could be greatly enhanced through improved access by farmers and traders to market information.

Quite apart from the need for reliable agricultural price information as a necessary complementary investment in securing the efficiency gains envisaged from policy reform and the road construction program, accurate agricultural price series will be required to monitor and evaluate the impact of measures designed to improve marketing efficiency. The likely magnitude of such improvements is particularly important in the current context, where the National Cereals Produce Board (NCPB) is being mandated to undertake cereal market support activities which will require government subvention. Accordingly, central government policy makers need to be assured that the mix of proposed policy changes will result in a net benefit to the economy in general, and cereal sector participants in particular.

Following from the above considerations, KMDP conditionality requires GOK to implement an effective agricultural marketing information system via an agreed plan for increasing the accuracy, timeliness, reliability and usefulness of market price information. This study is intended to assist in meeting these requirements. What follows is an executive summary of study analysis, findings and recommendations which are detailed at greater length in an accompanying second volume.

## **2. SURVEY OF EXISTING AGRICULTURAL MARKET INFORMATION SYSTEMS**

### **Overview**

There are, currently, several organisations within the government which compile information on prices of agricultural commodities and general market conditions on a regular basis. The Central Bureau of Statistics (CBS) within the Ministry of Planning and National Development (MoPND) and the Farm Management Division (FMD) within the Ministry of Agriculture (MoA) both collect information on domestic agricultural market conditions. Parastatals such as the Horticultural Crop Development Authority (HCDA), the Kenya Tea Development Authority (KTDA) and the Coffee Board of Kenya (CBK) compile information on export market conditions and prices.

The National Cereals Produce Board (NCPB) is also currently considering establishing its own system for collecting open market grain prices. Should, however the NCPB implement such a plan, it is unlikely that price information would be made available to the public for several reasons; price dissemination is clearly not within the mandate of NCPB; NCPB does not have the resources nor organisation to undertake dissemination; and, it is generally perceived that open market price dissemination may undercut NCPB's ability in meeting its price stabilisation and food security functions.

Finally, the Ministry of Supplies and Marketing (MoSM) is planning to establish a system for collecting open market grain prices in each district. It appears, however, that exact procedures for collecting and reporting prices have yet to be worked out. For reasons advanced above, it is unlikely that prices collected by MoSM would be made public.

### **Central Bureau of Statistics**

CBS Agricultural Statistics Section (ASS) collects retail prices for nine staple and horticultural products in 64 markets on a weekly basis. The number of markets monitored varies from district to district and products monitored include maize, beans, millet, sorghum, cabbage, potatoes, banana, tomatoes and sukuma wiki (kale). The system functions primarily as a price monitoring system, the intention being to provide information to GOK analysts and policy makers. Even in terms of this objective, however, current performance is less than adequate. For instance, prices collected over the period 1976 to 1985 are not readily accessible because of equipment and processing difficulties, while prices collected after 1986 are not yet available due to a major bottleneck in the system.

## **Farm Management Division of MoA**

FMD collects wholesale prices of green maize and approximately 25 to 30 horticultural crops in ten major markets throughout the country. Frequency of collection ranges from daily, for larger markets such as Nairobi, to weekly in smaller, periodic markets such as Eldoret. In general, prices are collected in four or five of the ten markets in any one day. The prices for horticultural crops are disseminated to the public on a relatively timely basis via newspapers and radio broadcasts. The performance of the system, however, is inadequate. Fiscal difficulties have undercut the frequency and timeliness of collection and dissemination. More importantly, the information that is disseminated is widely perceived by the private sector as unreliable and not particularly useful. Indeed, very few farmers and traders interviewed paid any attention to the publicly-disseminated prices: instead, most private sector participants rely entirely on informal sources of market information.

In addition, the FMD collects wholesale and retail prices of roughly 35 to 40 staple and horticultural products in approximately 620 smaller rural and urban markets. These prices are generally not disseminated to the public nor are they systematically added to FMD's database. Currently, the data are used almost exclusively to produce internal periodic marketing reports at the District and Divisional level. FMD does, however, intend to use this data in marketing extension activities in the future.

## **Conclusions**

A review of current and intended information sources on agricultural prices (including informal systems used by traders and farmers) points to a lack of market transparency and the need for a centrally-operated market information source that would provide equal access to information on agricultural prices and market conditions throughout the country. In addition to contributing to greater equity in the marketing system, a comprehensive market information service would also contribute substantially to improved economic efficiency as supply and demand conditions become better coordinated over time and space.

Of the systems, reviewed, no single system appears capable of fulfilling the information needs of both public and private sector users in line with the general objectives of the KMDP. However, two of the existing systems, CBS and FMD, when considered together, are particularly appropriate and potentially very capable of fulfilling the extensive information needs of KMDP. FMD already collects and disseminates wholesale price information in major urban markets on a relatively timely basis. Only a slight expansion of commodity and market coverage along with efforts to strengthen and rehabilitate the system would be required to ensure that the information needs of the private sector are met.

Similarly, CBS has accumulated a database that could be invaluable to GOK officials and the donor community in monitoring the impact of cereal policy reform. Moreover, it is worth noting that both systems have been operating for over a decade; the mechanisms for collecting, reporting and disseminating information, albeit in disrepair, are essentially well in place.

Finally, with some strengthening and reorientation, the FMD system for collecting market prices in approximately 620 smaller rural and urban markets could provide agricultural extension workers with the means to address the specific market information needs of the small farmer.

### 3. A STRATEGY FOR STRENGTHENING AGRICULTURAL MARKET INFORMATION SERVICES (MIS)

#### **Demand for MIS**

The demand for domestic agricultural market information in Kenya is manifest at four major levels:

- . **Farmers** seek information about: prices they can expect to gain in the future as they make planting decisions in the present; prevailing prices in local markets that they can use as a basis for negotiation with traders; and the whereabouts and accessibility of buyers for their produce;
- . **Traders** want to know where they can "buy cheap and sell dear": ie. market prices and conditions at major supply and selling points across the country;
- . **GOK** has an interest, in some cases incipient, on dual levels. At the national level, key ministries (eg. OTP, MoF, MoPND, MoA, MoSM) seek to ensure that the interests of important groups (eg. farmers, consumers, GOK) are not threatened as a result of policy reforms. NCPB wishes to

utilise information on staple food stocks and market prices to ensure that the food security of the nation is not at risk and that there is an appropriate regional distribution of food staples. At the provincial and district levels, some officials wish access to monthly price reports on food items as a means of gauging food supply conditions at the local level and some MoA farm management/extension officers wish a reliable source of local market information to provide marketing extension advice to their client farmers;

- . Donors seek information on the impact of existing GOK agricultural policies on market prices for staple food crops and wish to monitor the effect of changing prices and regulations on market prices.

### **Institutional Options**

There are a number of institutional vehicles that could, in principle, be proposed to meet the market information needs delineated above. To propose, however, the establishment of a new organisation to provide these services would be to create a duplication with the activities of existing institutions. As concluded above, two of the existing systems - those undertaken by CBS/ASS and MoA/FMD - are potentially capable of fulfilling the requirements of a user-driven MIS. Moreover, the possibility of private sector involvement in providing an effective MIS is also limited by considerations of duplication, lack of resources, and the "public good" nature of publicly-disseminated price information.

An assessment of the existing institutional capacity of CBS and FMD reveals, however, a number of areas of organisational weakness that need to be addressed in designing an effective MIS strategy, most notably the following:

- . a "process" orientation of senior management that tends to view the collection of data as an end in itself rather than the means to provide a better understanding of marketing issues and to meet user requirements;
- . problems of adequate supervision of data collection arising from staff shortages, unattractive terms and conditions, inadequate training, and shortages of transport and other equipment;
- . in the case of FMD, a lack of adequate communication facilities to ensure timely reporting of price data;
- . at the enumerator level, shortages of basic equipment (scales and measuring tins) and transport allowances to ensure prescribed market coverage and visit frequency.

Aware of these deficiencies, both CBS/ASS and MoA/FMD have put forward proposals to government to strengthen their respective organisations, primarily through recruiting staff to meet agreed establishment levels. It is a major assumption of proposed assistance to both organisations that action will be taken on these proposals. A favorable response by GOK is, therefore, an important aspect of project sustainability.

### **Proposed Project Approach**

The basic thrust of a proposed project to provide an effective MIS would be to refocus and revitalise existing services provided by CBS and FMD in such a way that they are driven by the needs of the information users: ie. to establish a market-oriented MIS. A logical framework analysis for the proposed project is presented in Chart 1 attached.

Major project outputs would include:

- . a daily MoA/FMD wholesale market report, published in the national press and broadcast on radio, for key commodities (including maize and beans) in major urban markets and supply market centers that are used by, in particular, traders and large-scale farmers to assist them in making better buying and selling decisions. A key feature of this revamped service would be bi-weekly commentary on likely future market conditions for selected commodities;
- . the provision by CBS, on a frequent and regular basis (monthly or quarterly) of retail price data on major food items (including staple crops) across important rural and urban market centers in Kenya for the use of policy analysts in GOK and donor agencies;
- . a much strengthened MoA capacity at the district and divisional level to provide marketing extension services to small-scale farmers. This would be effected by analysis at the divisional level of data currently collected in sub-locations to provide localised price trends analysis for incorporation into a marketing extension handbook;

**CHART 1: PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK**

Project Title & Number: **STRENGTHENING AGRICULTURAL MARKET INFORMATION SYSTEMS AND SERVICES IN KENYA**

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><b>Program or Sector Goal:</b> The broader objective to which this project contributes: To contribute towards increasing returns and enhancing the stability of returns to farmers from the sale of staple and other food crops in the domestic market.</p>	<p><b>Measures of Goal Achievement:</b></p> <ul style="list-style-type: none"> <li>. Decreased deviation of seasonal price trend from long term price trend.</li> <li><b>a. Progress/Benefit</b></li> <li>. Inter-market prices more closely reflect transport and other market costs than at present.</li> <li><b>b. Benefit Incidence/Beneficiary</b></li> <li>. Narrowing of farm to retail price spreads for key commodities.</li> <li>. Increasing number of requests for price data from policy-makers.</li> </ul>	<p><b>MEANS OF VERIFICATION</b></p> <ol style="list-style-type: none"> <li>1. Variation analysis (temporal and spatial) using MIS and CBS data.</li> <li>2. Farmer and Trader Surveys.</li> <li>3. Survey of extension offices at district and divisional level.</li> <li>4. Files of CBS and MIS/MOA.</li> </ol>	<p><b>IMPORTANT ASSUMPTIONS</b></p> <p><b>Assumptions for achieving goal targets:</b></p> <ol style="list-style-type: none"> <li>1. GOK liberalise the marketing of staple food crops as per the CSRP timetable.</li> <li>2. Lack of market information currently disadvantages farmers and causes unduly high inter-regional and inter-seasonal price differentials for staple crops.</li> <li>3. Injecting more and better price market information increases market transparency and fosters market-oriented production and marketing behaviour by farmers and traders.</li> <li>4. Lack of reliable price data is a critical bottleneck in designing agricultural marketing policies.</li> </ol>
<p><b>Project Purpose:</b> To increase market transparency for farmers, traders, policy-makers and development agencies with regard to price trends for maize, beans and other food crops in Kenya.</p>	<p><b>Conditions Expected at End of Project:</b></p> <ul style="list-style-type: none"> <li>. at least 20% of traders use MIS on regular basis.</li> <li><b>a. Progress/Benefit</b></li> <li>. at least 50% of extension workers have access to MIS output and use it in work with farmers</li> <li>. DPD/MOA and major donors undertake</li> <li><b>b. Benefit Incidence/Beneficiary</b></li> <li>. regular monitoring and analysis of food staple market conditions.</li> </ul>	<p>Surveys conducted with farmers, traders, GOK policy analysts, development agencies on usefulness of MIS and understanding of cereals policy/regulatory issues.</p>	<p><b>Assumptions for achieving purpose:</b></p> <p>Farmers/traders/policy analysts and makers act on the market information that is provided through the project.</p>
<p><b>Outputs:</b></p> <ol style="list-style-type: none"> <li>1. Daily MOA wholesale market report on key commodities for major urban markets and supply market centres, broadcasted on national radio and published in national newspapers and used by fresh produce traders.</li> <li>2. CBS providing weekly retail price data on key commodities in 64 rural market centres (including the KMDP districts) for analysis by DPD/MOA, other agencies and donors.</li> </ol>	<p><b>Magnitudes of Outputs</b></p> <ul style="list-style-type: none"> <li>. Daily radio/newspaper reporting established for staple food items.</li> <li><b>a. Progress/Benefit</b></li> <li>. MOA MIS and extension staff at District/Divisional level complete training courses</li> <li>. Marketing extension handbook produced</li> <li><b>b. Benefit Incidence/Beneficiary</b></li> <li>. Evaluation report based on surveys conducted with farmers, traders, extension officers, enumerators.</li> </ul>	<ol style="list-style-type: none"> <li>1. Daily market conditions bulletins</li> <li>2. Manual of Operations for MIS wholesale service</li> <li>3. DPD/MOA and donors having regular access to CBS retail prices</li> <li>4. Periodic radio programs/newspaper articles/seminars for key interest groups completed</li> <li>5. Marketing extension component included in district/division extension program</li> <li>6. Project Progress Reports &amp; Evaluations</li> </ol>	<p><b>Assumptions for achieving outputs:</b></p> <ol style="list-style-type: none"> <li>1. Adequate cooperation between CBS and MOA with regard to data accessibility.</li> <li>2. No political restriction on publishing of information on policy changes, prices and market conditions.</li> <li>3. Effective cooperation and liaison between national and district/divisional level staff, AIC.</li> <li>4. Project inputs available as per plan.</li> </ol>
<p><b>IMPACT</b></p> <ol style="list-style-type: none"> <li>3. Strengthened MOA capacity at district and divisional level to provide marketing extension services to small-scale farmers.</li> <li>4. National broadcasts and newspaper publications, seminars targetted at key interest groups on the changing shape of the cereals policy environment and its implication for the public and private sector.</li> </ol>	<p><b>Implementation Target (Type and Quantity)</b></p>		<p><b>Assumptions for providing inputs:</b></p>
<p><b>INPUTS</b></p> <ul style="list-style-type: none"> <li>. Long term TA (60pm) . Short term TA</li> <li>. Motor bikes and (expat &amp; local) spare parts</li> <li>. Printing materials and supplies</li> <li>. Training equipment &amp; supplies</li> <li>. Micro-computers, supplies &amp; software</li> <li>. Equipment for district level MIS</li> <li>. Local currency funds for MIS applications.</li> </ul>	<p>Local currency for in-country training courses Forex for scholarships and ex-region within region short courses and OTJ training Local currency for media costs of MIS and policy dissemination programs.</p>	<p>Inspection and audit of project resources.</p>	<p>Project proves acceptable for donor-funding.</p>

- . an explicit program, including components directed inter alia at farmers, traders, police and municipal authorities, GOK personnel at the national, provincial and district levels, NCPB and MoSM head office and field personnel, to educate interested parties as to the cereals status quo and the subsequent changing regulatory environment associated with the marketing of maize, beans and other staple food crops in Kenya.

The way in which intended project outputs would meet differing user requirements, together with required inputs, delivery mechanism and attendant agency responsibility, is presented in summary form in Table 1 attached. It should be noted that following discussions with senior management of the Agricultural Information Centre (AIC), it was concluded that no formal institutional support was required by AIC to undertake its role in dissemination. The proposed project does, however, include provision for incremental costs incurred by AIC in carrying out the augmented responsibilities shown in Table 1.

### **Project Components**

The proposed project will provide emergency support to the Agricultural Statistics Section of CBS to enable the section to clear its backlog of work on retail price collection and dissemination, and establish ongoing systems and procedures for the regular production and dissemination of "clean" market price data to government and donor policy analysts. The emergency support team will be led by one long-term expatriate TA, assisted by short-term TA as required. It is envisaged that six man-months of short-term TA will be required for downloading of data, training needs assessment and training manual production, and the setting up of in-house printing facilities with attendant training.

Once this emergency phase is accomplished, the project will provide longer-term support to the Agricultural Statistics Section in: provision of needed commodities (scales, measuring tins; motor bikes and spares, micro-computers and software, training equipment and printing supplies, publishing equipment and supplies); in-country training of head office and field level staff in market price data collection, processing, analysis, and dissemination; regional short-course training of section senior staff in management of data collection, processing, analysis and dissemination; and, provision of a pool of local currency funds for key operational expenditures associated with market price data collection and observation (e.g. for covering enumerator transport costs). The total duration of project - financed support for the section would be two years.

**Table 1: MEETING HIS USER NEEDS**

<b><u>MIS USER</u></b>	<b><u>INPUT (Agency)</u></b>	<b><u>OUTPUT (Agency)</u></b>	<b><u>DELIVERY (Agency)</u></b>
1. Large farmers/ traders	Wholesale price data (FMD)	Daily wholesale price reporting, bi-weekly market commentary (FMD)	1. Newspaper (FMD) 2. Radio (AIC)
2. GOK/donors	Retail price data (CBS)	Monthly or quarterly price series (CBS)	1. Informal to GOK: MoA/DPD and donors (CBS)  2. Monthly/quarterly statistical bulletin (CBS)
3. Small farmers	Sub-locational market price data (FMD divisional level)	Periodic summary price/trend analysis (FMD divisional level)	Marketing extension material (AIC)
4. Large farmers/ traders/millers	Market regulations (MoSM/CSRP Steering Committee)	Agreed policy statements on regulatory environment (FMD)	Mass media campaign (AIC)

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The major inputs to the MoA/FMD component of the proposed project are similar to those envisaged for the CBS component, namely:

- . technical assistance - comprising one long-term expatriate advisor based in the MIS unit/section at MoA/FMD for a three-year period, supported by 14 man-months of short-term technical assistance in areas such as user needs, commodity and market coverage, grades and standards, training needs assessment, training manual preparation and training of trainers. The long-term T.A. person would be chief-of-party for the proposed project;
- . provision of commodities - including computers and software, communications equipment, motor-bikes and spares, scales/measuring tins, training equipment and supplies;
- . in-country training of head office and field level staff in market price and market condition data collection, processing, analysis and dissemination, with particular emphasis on district and divisional level training of extension officers in marketing matters and in-country formal training of key junior staff in agricultural marketing and related subjects;
- . regional short-course training of MIS unit/section staff in MIS management, and other key staff in agricultural marketing, price analysis, etc., including on-the-job training visits to MIS units within the region (e.g. the Market Development Unit of GRT in Dar es Salaam, Tanzania);
- . provision of local currency funds for key operational expenditures associated with MIS activities (e.g. for covering transportation costs at the local level).

In addition to the two major components outlined above, the proposed project will have a Monitoring and Evaluation (M&E) component which will be more specifically focused on monitoring and evaluating the impact of the project and associated USAID and GOK initiatives (i.e. rural road rehabilitation, reform of cereals policy and regulations) in the six KMDP districts. The M&E team will comprise short-term expatriate T.A. advisors and a Kenyan market research firm. The latter will focus on providing the "ground truth" to confirm the veracity and usefulness to users of MIS "products" emanating from MoA/FMD and other GOK ministries and agencies (e.g. NCPB and MoSM).

The project would, finally, provide operational funding for AIC to meet the additional dissemination costs associated with extended MIS coverage. The major cost would be radio airtime, but provision would also be made for media campaign costs (newspaper, leaflets, and stickers), monitoring of newspaper and radio output, pretesting of media material, limited video and TV coverage, and revamping of AIC equipment.

#### **4. PROJECT IMPLEMENTATION**

##### **Pre-operational Period**

USAID has agreed, in principle, to fund the project outlined above as a component of KMDP. The original timetable for implementation of an effective MIS was December 1990. This timing was, however, based on signing the KMDP agreement with GOK in April 1990. In the event, signing was delayed until the end of July 1990. It is USAID's intention to try to keep to the original schedule. The main pre-operational leadtime, and, therefore, the critical item in meeting a year-end deadline for implementation is in the hiring of long-term expatriate TA. Other pre-operational activities are less critical; capital items could, for instance, be procured locally, subject to USAID regulations concerning duty and tax free status.

One solution to the TA "critical path" would be to initiate the project prior to the arrival of the two long-term technical advisors with short-term TA substituting initially in their roles. Given, however, the relatively short duration of the project and the importance of coordination and continuity in ensuring its effectiveness, this solution is less than ideal and should be discounted. Implementation timing, if necessary, should be revised to allow for a realistic leadtime in contracting expatriate technical assistance.

##### **Operational Period**

Major implementation steps and activities are summarised below:

##### **CBS Data Backlog**

The initial task for CBS will be to download historical price data to a PC, verify and analyse the data and produce a tabulation of historical price series.

## **User Needs Analysis**

The accompanying main volume to this executive summary presents preliminary conclusions concerning the needs of the various potential MIS users. This analysis will require refining at an early stage of project implementation. Of particular importance will be the need for close liaison with AIC in the pretesting of media material with potential users to ensure that proposed media formats are appropriate and deemed useful.

## **Market Coverage**

Again, recommendations have been made in the main volume of this study concerning market coverage. These recommendations will require firming up and agreeing with CBS/ASS and MoA/FMD, not least because the extent of market coverage will determine quantities of certain equipment to be financed under the project. For FMD, market coverage will also include agreed recommendations on grades and standards and transaction levels.

## **Computer Installation/Training**

The project will provide PCs and attendant software for both CBS/ASS and MoA/FMD. An early task will, therefore, be installation of hardware and suitable training for staff on the use of the recommended software, SPSS/PC+.

## **Communications Equipment**

For CBS/ASS this will entail establishing dedicated in-house printing facilities for publication of historical price series and for subsequent monthly or quarterly statistical bulletin production. In MoA/FMD dedicated telephone lines will be installed for transmitting price data to Nairobi from the districts. The exact number of telephone lines required will follow from the analysis of market coverage.

## **Seminar on Price Collection**

Once the above activities have been undertaken, it is desirable that head office and field staff in each organisation are assembled to discuss findings and recommendations in terms of price collection. The seminar will also provide an opportunity to finalise procedures manuals and to select candidates to attend training of trainers courses.

## **Training Needs Assessment**

Concurrent with the above, an assessment will be made of training requirements in CBS/ASS and MoA/FMD at both head office and field level, resulting in production of training manuals. Once this activity is completed, in-country and regional training programs will be initiated.

## **Dissemination Media and Format**

The main volume of this study contains a detailed media strategy for MIS dissemination. The phasing of required tasks is summarised below:

### **. Marketing information service**

- Preliminary research to identify audience needs.
- Pretest pilot programme.
- Daily radio and press coverage of improved market information and commentary provided by FMD.
- Press material to be computer-set by FMD and delivered to press for publishing the following day.
- Radio material to be collected early in the morning and delivered to AIC for recording and distribution to KBC for evening or lunchtime program.
- Programs to be monitored daily and evaluated regularly.

### **. Mass media campaign to announce new regulations and improved MIS**

- Agree on simple language for existing, and subsequent changes to, cereals movement regulations.
- Finalise schedule for contributions to, and distribution of, market regulation information in accordance with timing specified in KMDP Program Agreement.
- Devise series of press announcements and book publication space and date.
- Devise series of radio programs for national and vernacular services and book airtime with KBC.
- Print leaflets and stickers.

**. Extension worker support**

- Write and produce pilot handbook for testing.
- Produce handbook.
- Train subject matter specialists in extension workers use of handbook and leaflets.
- Subject matter specialists train and distribute handbook and leaflets at extension workers two-weekly meetings.
- Encourage extension workers to use locally provided prices to encourage improved practices with farmers.

**Implementation Schedule**

The phasing of the above project activities are shown graphically in Figure 1 attached for the first 12 months of project implementation. Activities are grouped under the three agencies (CBS/ASS, MoA/FMD, and AIC) responsible for implementing them. The major implementation milestones are:

- . CBS produces a report on historical retail price series by beginning of month 5;
- . quarterly bulletins are produced by CBS from month 7 onwards;
- . wholesale price data in improved format is provided by FMD from month 5 onwards with bi-weekly written commentary in the following month;
- . local price analysis at the divisional level is undertaken from month 7 onwards;
- . AIC introduces mass media campaign in month 4 of the project;
- . AIC produces marketing extension handbook by month 6 of the project;
- . AIC produces national and vernacular radio programs for the improved MIS from month 5 onwards, with the addition of bi-weekly market commentary the following month.

Annual project monitoring and evaluation would, finally, be undertaken during the first two months of the following year and thereafter for the project duration.

Figure 1: MIS PROJECT IMPLEMENTATION PLAN

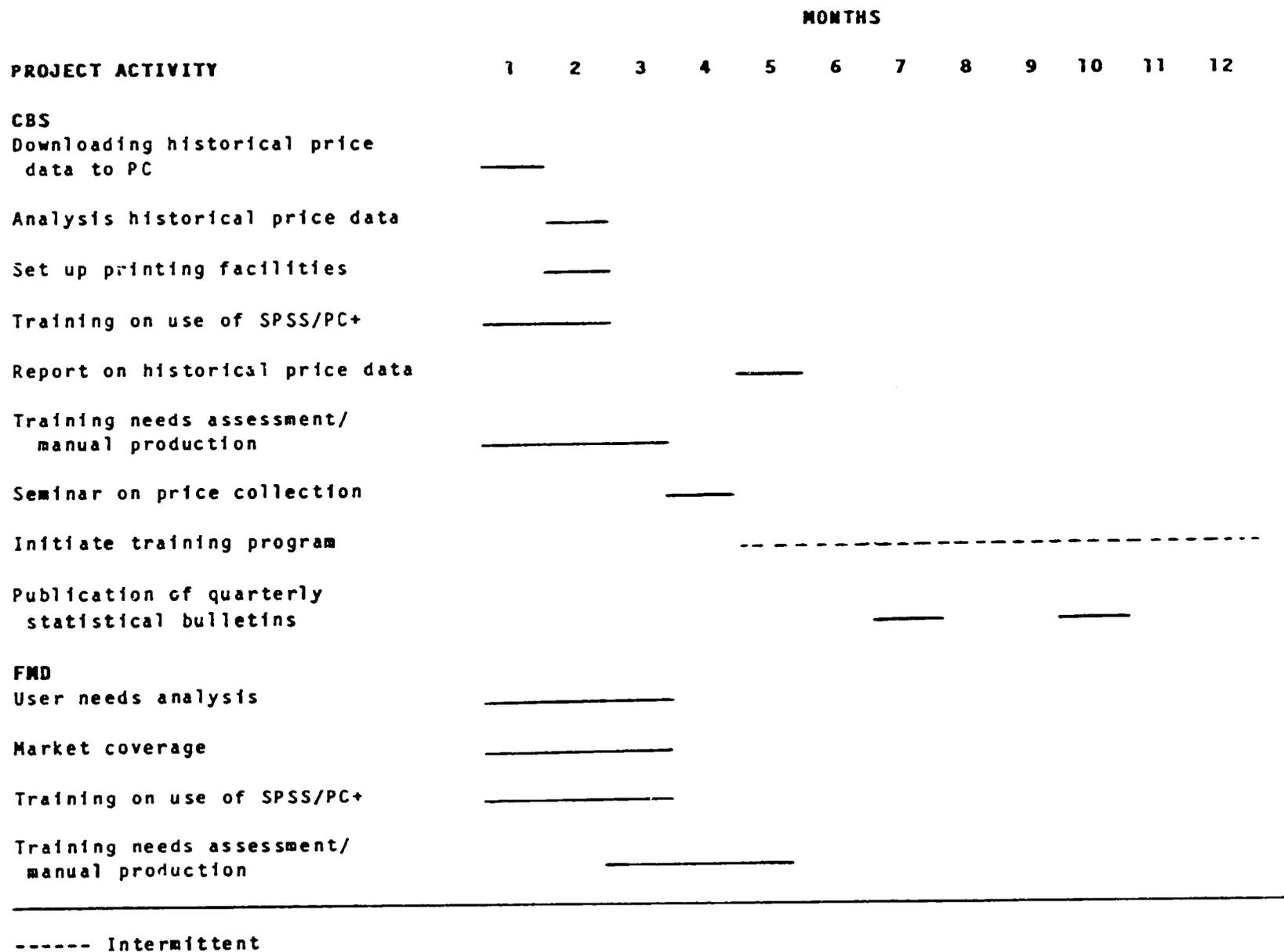
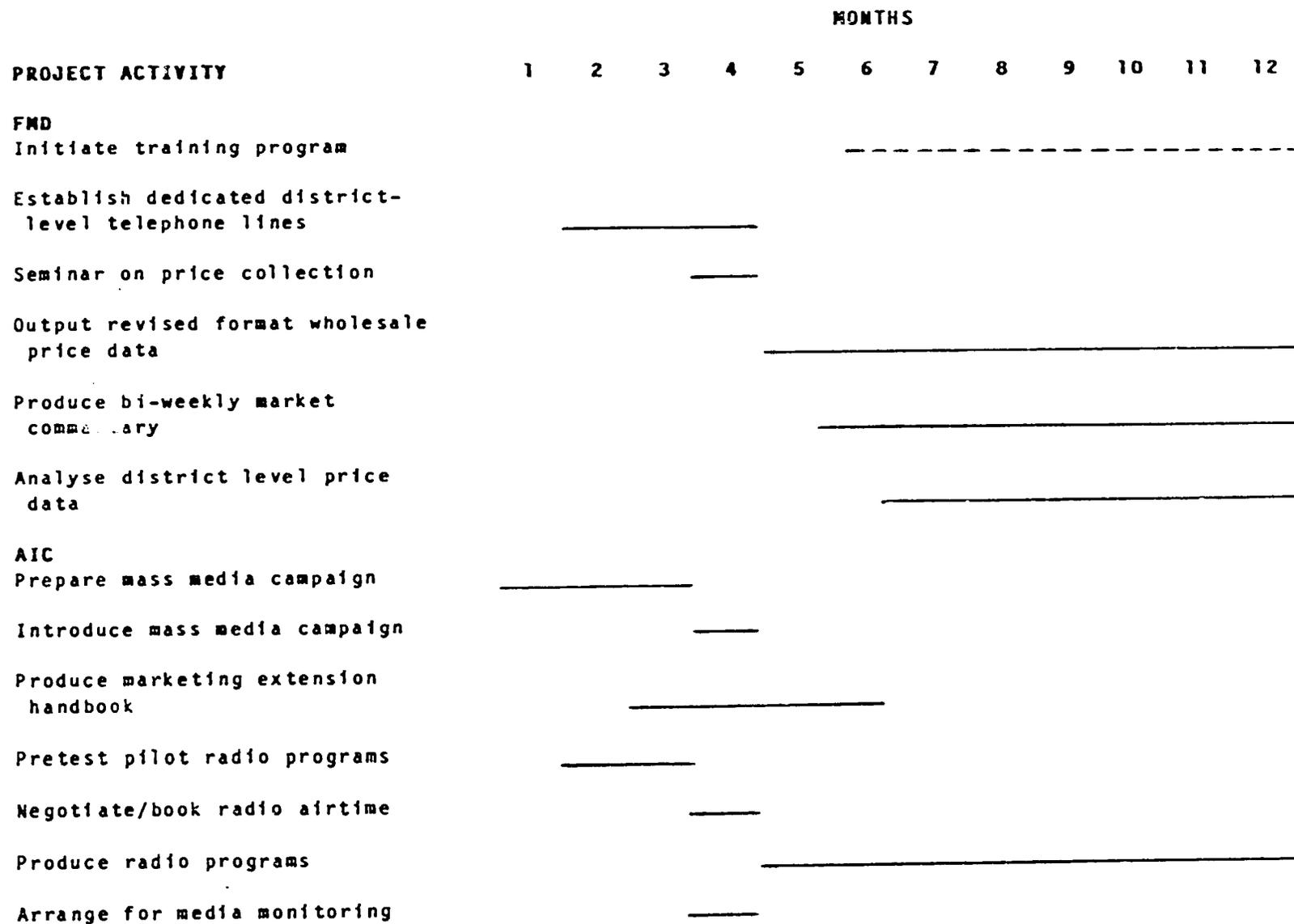


Figure 1: MIS PROJECT IMPLEMENTATION PLAN (continued)



## 5. PROJECT CONTENT, JUSTIFICATION AND SUSTAINABILITY

### Project Content

A definitive list of the content of a donor-supported project cannot at this stage be produced; certain items, for instance, will depend upon the extent of market coverage. What follows, therefore, is an indicative listing of project items to be funded over the proposed three-year life of the project, set out under the general headings of technical assistance, equipment, operational expenditures, printing and communications, and media dissemination.

### Technical assistance

The technical assistance to be provided under the project is summarised below.

### Project Technical Assistance

<u>Organisation</u>	<u>Long-term TA</u>	<u>Short-term TA</u>
CBS/ASS	1 TA x 2 years	6 man-months Year 1 (Data downloading one man-month, training needs assessment and manual production four man-months, establishment printing facilities and training one man-month)
MoA/FMD	1 TA x 3 years	14 man-months Year 1 (User needs/training/pre-testing 6 man-months, market coverage/grades/standards 3 man-months, training needs assessment and manual production 5 man-months.) (Monitoring and evaluation, Year 1-3, one man-month expatriate and 2 man-months local TA per annum)

## **Equipment**

Equipment requirements would include two vehicles for the long-term TA and provision for running costs. On the basis of district-level market coverage of 40 and 20 for CBS/ASS and MoA/FMD respectively, approximately 60 motor-bikes would be required for supervisors, again with an allowance for spares and operating costs. In line with indicative market coverage, approximately 100 sets of scales and measuring tins for CBS and 20 sets for FMD would also be required. In terms of enhancement to current data processing capabilities, two IBM-compatible (one 286 and one 386 with 100 MB hard disc drive) computers with power back-up systems, attendant software, one laser printer, and 20 boxes of diskettes would be required for each organisation.

## **Operational expenditures**

Operational expenditure would cover enumerator transport. It is assumed that this would entail matatu transport costs for approximately 100 CBS enumerators, 20 FMD enumerators and 200 FMD Agricultural Assistants to meet prescribed market coverage and visit frequency.

## **Printing and communications**

In line with recommendations concerning the desirability of a dedicated in-house printing capability, the project would fund a Gestetner duplicator and binder plus recurrent costs for CBS/ASS. For MoA/FMD, provision would be made for approximately 20 district-level dedicated telephone lines plus operating costs for the project period.

## **Training**

Training expenditure would include approximately one month of external training (eg. ESAMI in Tanzania) for each year of the project for approximately ten head office senior management staff of both CBS/ASS and MoA/FMD. Local training would include two-week courses, again for senior management over the project period, in generic management training, computers, and agricultural marketing. In addition, local funding would be made available for training-of-trainers courses in data collection techniques, assumed to be attended by district-level supervisor of each organisation in classes of ten for a period of two weeks in each project year.

## **Media dissemination**

Funding, finally, would be made available for the production by AIC of extension workers' marketing manuals, campaign leaflets and stickers, and newspaper announcement costs. Radio airtime costs would also be met (both national and vernacular) in line with recommended scheduling, together with provision for monitoring of radio and print output. A modest budget for video production and TV inserts would finally be provided plus provision for some initial (project year 1) costs associated with revamping AIC equipment, per diem costs for AIC staff involved in media material pretesting, and radio program production costs.

## **Project Justification**

Quantification of the benefits attributable to a market information services project poses certain difficulties. It is, for instance, impossible to distinguish potential returns from other complementary investments in infrastructure and the catalytic effect of other changes, notably in the policy environment, but also in areas such as relative crop prices, the availability and cost of inputs, credit, etc.

In view of this basic methodological problem, the approach normally adopted is to derive the annual level of benefit that would be required to yield a target economic internal rate of return to the project. This level of benefit can then be compared to total quantifiable potential benefits from the project and a view taken as to how realistic securing such a level of benefit would be in practice.

If considered a necessary investment in securing the benefits arising from cereal sector policy reform, the required level of benefits may be compared to the net economic benefits expected to accrue from the reform process. The magnitude of net economic benefits has been estimated in a recent report, commissioned under the KMDP, to be in the range US\$ 16 - 18 million per annum from year 4 onwards of implementation of KMDP and its associated market reform package. It is likely, even with the extrapolation of the recurrent costs required to maintain an effective MIS beyond the project life over the long-term, and a requirement that the project yields a return of 12 percent, that the required annual benefit level would be a modest proportion of this figure. Thus it can be argued that the contribution of an effective MIS (as opposed to what, it is argued, would constitute a continuing ineffective provision of market information in the absence of project support) would only have to be a small proportion of realisable benefits for the investment to be justified.

## **Project Sustainability**

The sustainability of the MIS beyond the end of the proposed project is an important issue: previous experience with donor assistance to market information projects indicates that the level of service can deteriorate rapidly once donor funding ceases. It is, clearly, impossible at this stage to guarantee sustainability. The design of the proposed project is, however, intended to mitigate the likelihood of terminal decline at the end of three years, notably by:

- . creating a service which is user-driven. It is much less likely that the MIS will be allowed to lapse if it is generally perceived as useful. The initial refinement of user needs, together with annual M&E of the service over the duration of the project, should help to ensure this;
- . agreement with GOK to an effective organisation and management structures for both CBS/ASS and MoA/FMD as well as a formal elevation in the status of both organisations;
- . the major recurrent cost item in sustaining service effectiveness is radio airtime. The intention, however, is that private sector sponsorship would be secured by the end of the first year of the project. This is considered a realistic timing, but even if it were not met, there would be a further two years of project funding to take remedial action and refine the dissemination strategy to ensure sponsor interest by the end of year 3 at the very latest.